

Title (en)
TOWER BASED ANTENNA INCLUDING MULTIPLE SETS OF ELONGATE ANTENNA ELEMENTS AND RELATED METHODS

Title (de)
AUF EINEM TURM BASIERENDE ANTENNE MIT MEHREREN SÄTZEN VON LÄNGLICHEN ANTENNENELEMENTEN UND ZUGEHÖRIGE VERFAHREN

Title (fr)
ANTENNE BASÉE SUR UNE TOUR COMPRENANT PLUSIEURS ENSEMBLES D'ÉLÉMENTS D'ANTENNE ALLONGÉS ET PROCÉDÉS ASSOCIÉS

Publication
EP 3570373 A1 20191120 (EN)

Application
EP 19174391 A 20190514

Priority
US 201815980857 A 20180516

Abstract (en)
An antenna may include a tower extending vertically upward from a ground location, a first set of elongate antenna elements extending outwardly from the tower at a first height above the ground location, and a second set of elongate antenna elements extending outwardly from the tower at a second height above the ground location and below the first height. In some embodiments, at least one elongate antenna element of the first and second sets of elongate antenna elements may be electrically coupled to the ground location. A radio frequency (RF) feed may be electrically coupled to the first and second sets of elongate antenna elements.

IPC 8 full level
H01Q 9/40 (2006.01); **H01Q 1/14** (2006.01); **H01Q 9/34** (2006.01); **H01Q 9/36** (2006.01); **H01Q 9/38** (2006.01)

CPC (source: EP KR US)
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Citation (applicant)
• US 6873300 B2 20050329 - MENDENHALL GEOFFREY NORMAN [US]
• CHU, L. J.: "Physical limitations of omni-directional antennas", JOURNAL OF APPLIED PHYSICS, vol. 19, December 1948 (1948-12-01), pages 1163 - 1175

Citation (search report)
• [X] US 3419873 A 19681231 - TANNER ROBERT L, et al
• [X] WO 2017025675 A1 20170216 - TDF [FR], et al
• [X] JP S5624818 A 19810310 - DENKI KOGYO CO LTD
• [A] US 3253279 A 19660524 - TANNER ROBERT L

Designated contracting state (EPC)
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)
BA ME

DOCDB simple family (publication)
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DOCDB simple family (application)
EP 19174391 A 20190514; KR 20190053802 A 20190508; US 201815980857 A 20180516; US 202017021204 A 20200915